Meeting Minutes

Meeting organized by	Paolo Calafiura	**Participants**	Andrea Cavalli, Charles Leggett, Julien Poffet, Yushu Yao
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Subjects

- We presented a first idea of VML architecture. The diagram is available on our website.
- The advantage of our first solution is that we can easy share the different working area available on the additional disk.
- Restoring an analysis which was running on an old release of CernVM implies that VML will be able to restore all the data of the working area but also the old version of CernVM.
- The drawback of our first solution is that we can restore only the working area but not the operating system and the applications. To do that we have to download from CernVM a new virtual machine, then start it and restore the working area inside it. The problem is these actions need that VML running in the guest virtual machine has to launch commands in the host machine. This raises all the security and access permissions problems.
- Actually CernVM publish only the major version of their virtual machine on their web site.
- A CernVM virtual machine cannot be updated to a specific version by using the automatic built-in update system. (For instance, assume that the last version of CernVM is 0.7 and you are running CernVM 0.6 and you want to upgrade it to the 0.6.25. The built-in automatic update system will update the machine straight up to the version 0.7.)
- VML must have an access to a particular version of CernVM. To do that, VML will do the following tasks:
    - Look in the local host machine if it can found the good release of CernVM
    - Download it from the CernVM repository
- We assume that downgrade a release of CernVM is not trivial.
- Mr. Calafiura will ask to the CernVM team if they can make available all the release of their virtual machine on their web site.
- VML should not be installed as a service running inside the host machine
- At this moment we think that the best place to run the VML service is inside a virtual machine.
- In addition of the "smart" snapshot, the user will also be able to make a "standard" snapshot by using the virtualization tool that runs the virtual machine.
- Mr. Calafiura proposes that instead of running the VML service on the host machine, we can run it inside another virtual machine (which we call VML virtual machine). In this approach, here is the task that you have to do:
    - Download the VML virtual machine, decompress it and run it
    - Connect your host machine's browser to the website of VML virtual machine

    - Select the entries of the VML on which you want working on.
    - The VML virtual machine will perform this tasks
        - Find or download a suitable version of CernVM
        - Start this new virtual machine
        - Open a connection between the two virtual machine
        - Restore the working area into the CernVM virtual machine
- The main complexity of the solution above is how to download on start a virtual machine on the host from the VML virtual machine.
- Mr. Yao proposed that we can prepare a preconfigured Phyton script in the VML virtual machine. Then the user may download it by using his browser and launch it. This script should download the correct CernVM version and start it.